

## North West Cambridge

**Future Phases of Eddington** 

September 2025

**Ecological Enhancement Plan** 





# North West Cambridge Masterplan Ecological Enhancement Plan

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### **Table of Contents**

1.	Introduction	
	Proposed Development	
	Biodiversity Priorities	
4.	General Measures to be Implemented Across All Plots	6
5.	Additional Specific Measures	8
6.	Biodiversity Monitoring	10
Figu	ure 1: Site Location Plan	1
Figu	ıre 2: Areas for monitoring	13



#### 1. Introduction

- 1.1 This report has been prepared by Mike Dean of MD Ecology Limited, on behalf of the University of Cambridge. It has been prepared to accompany an outline planning application for the future phases and will effectively supersede the approved site-wide Biodiversity Strategy that was prepared to discharge Condition 34 of the Outline Planning Permission (OPP) 2013.
- 1.2 The purpose of this report is to set out ecological enhancement measures proposed as part of the development of the Eddington site, also known as North West Cambridge. A series of measures are proposed to improve existing habitats, hedgerows and watercourses to allow the proposed development to achieve a Biodiversity Net Gain (BNG) of more than 10%; these are not detailed in this report as they are discussed in the BNG Report, which also accompanies the outline planning application.
- 1.3 The site is located between Huntingdon Road, Madingley Road and the M11 Motorway and is a former university farm. Phase 1 of the development has been constructed and future development areas are located to the east and west of Eddington. The location of the site is shown in Figure 1.

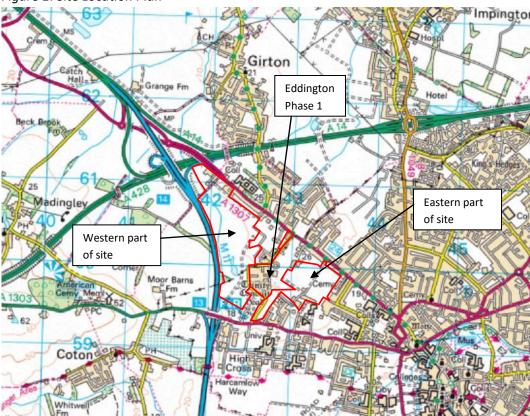


Figure 1: Site Location Plan

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- 1.4 The enhancement measures detailed in this document comprise:
  - Measures proposed in the approved site-wide Biodiversity Strategy that have not yet been delivered;
  - Measures required under Greater Cambridge Shared Planning's Biodiversity Supplementary Planning Document (February 2022)<sup>1</sup> and the Cambridge Local Plan 2018<sup>2</sup>; and
  - Other measures considered appropriate, but which fall outside of BNG.
- 1.5 This report has been prepared by Mike Dean. Mike has more than 25 years experience as an ecological consultant. He is a Fellow member of the Chartered Institute of Ecology and Environmental Management (CIEEM), a Chartered Ecologist and a Chartered Environmentalist. He is the Project Ecologist for North West Cambridge / Eddington and undertook the ecological impact assessment in the 2012 ES for the current outline planning permission as well as being the author of the approved site-wide Biodiversity Strategy.

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<sup>&</sup>lt;sup>1</sup> https://www.greatercambridgeplanning.org/media/2504/gcsp-biodiversity-spd-final-copy-march-2022-1.pdf

<sup>&</sup>lt;sup>2</sup> https://www.cambridge.gov.uk/media/6890/local-plan-2018.pdf



#### 2. Proposed Development

- 2.1 The Proposed Development is a phased mixed-use development, including demolition of existing buildings and structures, to the east and west of Eddington Phase 1. The development comprises:
  - Living uses, comprising residential (Use Class C3/C4, up to 3,800 dwellings), student accommodation (Sui Generis), Co-living (Sui Generis) and senior living (Use Class C2);
  - Flexible Employment Floorspace (Class E(g) / Sui Generis research uses);
  - Academic Floorspace (Use Class F1);
  - Supporting retail, nursery, health and indoor sports and recreation uses (Class E (a) E
     (f)); and
  - Public open space, public realm, sports facilities, amenity space, outdoor play, allotments and hard and soft landscaping works alongside supporting facilities;
  - Car and cycle parking, formation of new pedestrian, cyclist and vehicular accesses and means of access and circulation routes within the site;
  - Highway works;
  - Site clearance, preparation and enabling works;
  - Supporting infrastructure, plant, drainage, utility, earthworks and engineering works.
- 2.2 Detailed planning permission is also sought for the primary means of access to the site.



#### 3. Biodiversity Priorities

- 3.1 The most valuable habitats within, or immediately adjacent to, the site are:
  - Veteran Oak Tree (located within Eddington Phase 1 and outside of the site boundary for the current application);
  - Woodlands Storey's Way Wood, Cricket Pitch Wood and Pheasant Plantation;
  - Washpit Brook;
  - Brook Leys attenuation lagoon and associated reedbeds, grassland and tree planting;
  - Other wetland habitats within Eddington Phase 1 two stage channel and low flow channel as well as swales and ponds; and
  - Hedgerows and treelines, including the Horse Chestnut Avenue.
- 3.2 Enhancement measures for habitats, hedgerows and watercourses are primarily dealt with in the BNG assessment and report and are therefore not covered in detail in this document, except where additional measures are required beyond those needed to achieve an improvement in BNG condition.
- 3.3 The following species are present within the site and are considered a priority for enhancement measures, or require specific measures to be delivered to compensate for the impacts of the Proposed Development that are best described in this document:
  - White-letter hairstreak butterfly associated with elm trees within the site;
  - Other invertebrates small heath butterfly, the timberworm beetle Lymexylon navale, the tenebrionid beetle Pseudocistela ceramboides, the tree snipefly Chrysopilus laetus, the hoverfly Mallota cimbiciformis and the leaf beetle Podagrica fuscipes;
  - Great crested newt breeding in off-site ponds but also using small ponds within the site and likely to use terrestrial habitat within the site;
  - Common toad breeding in low numbers in ponds within the site and the lagoon, and likely to use terrestrial habitat within the site;
  - Grass snake not recorded but potentially present given the habitats available within the site;
  - Barn owl (breeding and wintering) nest site will be lost to the Proposed Development and compensation is therefore required;
  - Whitethroat (breeding) at least 20 pairs recorded using the site for breeding during baseline surveys, with a likely reduction in numbers as a result of the Proposed Development;
  - Woodcock (wintering) reasonable numbers of birds recorded feeding within a part of
    the site that will be developed for sports pitches and allotments and compensation is
    therefore required, which will be delivered through management of other areas of
    grassland;



- Bats barbastelle, noctule, brown long-eared, soprano pipistrelle and Nathusisus' pipistrelle;
- Water vole present throughout Brook Leys, within the Washpit Brook and associated wetland habitat including the two stage channel and low flow channel, as well as swales and ponds;
- Otter recorded at Brook Leys and on the Washpit Brook, but likely to be an occasional visitor only; and
- Hedgehog likely to be present in low numbers but the Proposed Development will provide increased habitat for this species.
- 3.4 In addition, orchids have been recorded in several locations within the site and adjacent parts of the Eddington site, or within other land managed by the University of Cambridge:
  - Bee orchids and lizard orchid within landscaped mounds alongside Eddington Avenue (northern end);
  - Bee orchids within the grass strip between the footpath/running track and hedge immediately north of Five Acres; and
  - Pyramidal orchid within the picnic area associated with the Madingley Road Park & Ride (one spike recorded in 2018 and 2019, but not since).
- 3.5 These areas will not be directly affected by the Proposed Development and specific enhancement measures are not proposed. The presence of the orchids will inform long-term management of these areas, and monitoring is proposed in this document.



#### 4. General Measures to be Implemented Across All Plots

Integrated bird boxes

- 4.1 Each residential plot will need to deliver integrated bird boxes. The number of bird boxes must equal (or exceed) the number of dwellings within that plot<sup>3</sup>.
- 4.2 Non-residential building plots will also need to deliver integrated bird boxes. The number of bird boxes must equal (or exceed) 10 bird boxes for the first 1000m<sup>2</sup> of building footprint, with an additional box required for every additional 100m<sup>2</sup> of building footprint<sup>3</sup>.
- 4.3 The boxes must target one of the following species: house sparrow, swift, starling or house martin. Bird boxes should be positioned at least 5m above ground level so that they are not interfered with, on north-, east- or west-facing aspects, and so that they are not directly above doors, windows or balconies. Full details of the numbers of boxes, their types and locations are to be provided as part of each reserved matters application.

Integrated bat boxes

4.4 Each residential plot will also need to deliver integrated bat boxes. The number of bird boxes must equal (or exceed) 25% of the number of dwellings within that plot<sup>3</sup>. Bat boxes should be positioned at least 5m above ground level so that they are not interfered with, primarily on south-facing aspects, and so that they are not directly above doors, windows or balconies. The boxes should be located close to areas of open space and away from well-lit areas, such as primary and secondary streets. Full details of the numbers of boxes, their types and locations are to be provided as part of each reserved matters application.

Hedgehog highways

4.5 All development plots will need to allow the movement of hedgehogs across the plot. Any run of close boarded fencing must include at least one 13cm x 13cm hole, with a 'hedgehog highway' sign fastened above it<sup>3</sup>. There should be sufficient holes to allow hedgehogs to access all rear gardens of residential properties and any areas of public open space. Full details of the number and location of hedgehog highways are to be provided as part of each reserved matters application.

<sup>&</sup>lt;sup>3</sup> This is a requirement of Greater Cambridge Shared Planning's Biodiversity Supplementary Planning Document (adopted February 2022).



Amphibians and reptile hibernation sites, log piles

- 4.6 Each reserved matters application will include a commitment to construct at least one reptile or amphibian hibernation site, or one log pile in a suitable location, to provide an additional wildlife feature.
- 4.7 Reptile hibernation sites should generally be provided within open space close to the Washpit Brook or allotments.
- 4.8 Amphibian hibernation sites should generally be provided within 100m of ponds.
- 4.9 Log piles should be provided in other locations, but should be in areas where there is limited public access.
- 4.10 Where there are no suitable locations within the boundaries of a given development plot, features may be proposed in more appropriate locations outside the plot boundaries, in areas of open space.

Green or brown roofs

4.11 All flat roofed buildings must incorporate either a green or brown roof (or a combination of either with solar panels)<sup>4</sup>. Full details of the type and location of green/brown roofs are to be provided as part of each reserved matters application.

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<sup>&</sup>lt;sup>4</sup> This is a requirement of Policy 31 of the Cambridge Local Plan 2018.



#### 5. Additional Specific Measures

Woodlands

- 5.1 The existing chestnut paling along the northern edge of Storey's Way Wood will be extended to also run along the western and southern edge of the woodland to discourage public access, when Plots H2, H3 or J come forward for development.
- 5.2 The existing chestnut paling along the northern and eastern edges of Cricket Pitch Wood will be extended to also run along the southern edge of the woodland to discourage public access when Plot J comes forward for development.
- 5.3 Chestnut Paling will be installed along the northern and southern edges of Pheasant Plantation when Amenity Cluster C comes forward for development, or the security fence that currently restricts access to the woodland from Brook Leys is removed.
- 5.4 Details will be set out in the reserved matters applications for the relevant plots / amenity cluster.

**Invertebrates** 

- 5.5 Disease-resistant elm cultivars will be included in the planting mix for areas of open space.
- 5.6 A proportion of the felled oak trees in the log pile in Plot J will be moved to a suitable area of retained habitat within the plot, when this plot comes forward for development.

Barn owl

- 5.7 At least two barn owl boxes will be installed within areas of extensive grassland habitat, to be provided in the western part of the site. These will be required to compensate for the loss of a barn owl nest site within Plot A. The boxes will be attached to poles or retained mature trees and located in areas with low levels of public access.
- 5.8 Further details will be set out in the reserved matters application for Plot A.

Whitethroat

5.9 Large areas of scrub are proposed for planting within areas of open space. These will be designed, planted and subsequently managed to achieve the highest condition score possible in terms of BNG. This will provide nesting and foraging habitat for whitethroat.



#### Woodcock

5.10 The area of grassland to the north of Pheasant Plantation will be managed to provide suitable foraging habitat for woodcock. This area has been left uncut in recent years and has become dominated by tall ruderal species such as thistle. It will be mown twice per year to develop a lower grassy sward which will provide improved habitat for woodcock.

Water vole

5.11 The wetland habitat on site will be managed to maximise its value for water voles, following the same regime as is currently in place. Cutting of in-channel or bankside vegetation (within 2m of the water's edge), and de-silting, will be done on a rotational basis so that no more than 50% of the available habitat is affected in any single year. Management works within 2m of the water's edge will be undertaken in autumn, when water voles are likely to be least sensitive to disturbance (and birds will no longer be nesting). Machinery will be kept 2m back from the bank face.

Otter

- 5.12 Two artificial otter holts will be provided along the Washpit Brook. This was a commitment in the approved site-wide Biodiversity Strategy, initially required by the time of occupation of the 1600<sup>th</sup> residential unit (1<sup>st</sup> holt) and 3000<sup>th</sup> residential unit (2<sup>nd</sup> holt).
- 5.13 The first of the two holts will now be provided in Pheasant Plantation as part of the reserved matters application for Amenity Cluster C.
- 5.14 The second holt will be provided along the Washpit Brook in the northern part of the site as part of the reserved matters application for Plot A.
- 5.15 Further details of proposed design and materials will be set out in the reserved matters applications for the relevant plots / amenity cluster.



#### 6. Biodiversity Monitoring

Scope

- 6.1 The proposed approach to monitoring set out in this document has been designed to collect data that will inform a general understanding of the biodiversity of the wider Eddington site, including the land covered by the current proposals for the North West Cambridge Masterplan, as well as Eddington Phase 1. It focuses on butterflies, birds and bats, using these groups as indicators of general biodiversity richness across the site. Water voles are included as an additional species, which is a national priority for conservation, and is present throughout wetland habitat within the site.
- 6.2 Targeted surveys for woodcock have also been included, to inform an assessment of the effectiveness of specific measures that have been proposed in this document. Monitoring of the numbers of orchids will also be undertaken.
- 6.3 Given that the majority of bird and bat boxes will be installed on residential buildings no targeted monitoring is proposed, although local residents will be asked to submit any records of birds or bats using the boxes. Bird and bat boxes installed within the site's woodland will be checked for evidence of use, and the boxed cleaned out at the same time.
- 6.4 Monitoring in relation to BNG is not included in this document as this will be detailed in a future Habitat Management and Monitoring Plan.
- 6.5 Monitoring in relation to great crested newts is also not included in this document; this has been detailed and agreed with Natural England as part of the mitigation licence, and may need to be amended with any future modification of the licence.

Monitoring programme

- 6.6 Monitoring will be undertaken across all completed parts of the site at 3-year intervals starting in 2030. Based on the current programme, the areas included in each monitoring period would be as follows:
  - 2030 All accessible areas shown on Figure 2, with the exception of the areas highlighted in purple or orange
  - 2033 As per 2030
  - 2036 As per 2033, plus Phase 3 (area highlighted in purple on Figure 2)
  - 2039 As per 2036 plus Phase 4 (area highlighted in orange on Figure 2)



#### **Butterflies**

- 6.7 A transect route will be walked across the areas to be surveyed in that year on a single day in June or July by a suitably experienced ecologist, proficient at identifying different butterfly species. A warm, sunny day will be selected.
- 6.8 The transect route will focus on the larger areas of open space, but will also sample smaller, accessible areas of open space within built development.
- 6.9 Other invertebrates encountered will be recorded. Piles of rotting tree trunks will be targeted for searches for the timberworm beetle *Lymexylon navale*.
- 6.10 The event will be open for local residents to also take part at the same time, and they will be encouraged to submit butterfly records to the Eddington / North West Cambridge team to supplement those species recorded on the day.
- 6.11 In subsequent years of monitoring the transect route from previous years will be followed and extended into new areas, as required.

**Birds** 

- 6.12 A transect route will be walked across the areas to be surveyed in that year on a single day in April, May or June by a suitably experienced ecologist, proficient at identifying different bird species by sight or sound. A day that is forecast to be dry with only light winds will be selected. The transect will start shortly after sunrise and be completed by mid-morning.
- 6.13 The transect route will focus on the larger areas of open space, but will also sample smaller, accessible areas of open space within built development.
- 6.14 The event will be open for local residents to also take part at the same time, and they will be encouraged to submit bird records to the Eddington / North West Cambridge team to supplement those species recorded on the day. Records of barn owl sightings and any evidence of use of bird nest boxes in buildings will be requested in particular.
- 6.15 In subsequent years of monitoring the transect route from previous years will be followed and extended into new areas, as required.
- 6.16 Bird boxes installed in the site's woodlands will be checked for evidence of use in September, in parallel with checks of bat boxes (see below).



Bats

- 6.17 Bat activity will be monitored using automated detectors, deployed for five consecutive nights in six separate locations in either June or July of each year of monitoring. The locations monitored will remain the same in each year, as follows (see Figure 2):
  - Horse Chestnut Avenue
  - Cricket Pitch Wood (south-east corner)
  - Swale between Kendrew Place and Eddington Avenue
  - Pheasant Plantation, close to Brook Leys
  - Washpit Brook north of Brook Leys and south of the track leading to M11 underpass
  - Hedgerow alongside track leading to M11 underpass
- 6.18 Locations may be monitored concurrently or in different weeks within the period.
- 6.19 Recordings of bat calls will be analysed using appropriate software to identify numbers of passes at each location by different species (as far as possible).
- 6.20 Bat boxes installed in the site's woodlands will be checked for evidence of use in September, in parallel with checks of bird boxes (see above). Bat boxes will be checked by a suitably licensed ecologist.

Orchids

6.21 The number of orchid spikes will be counted in the areas where orchids have been identified, or in any new areas. The count will take place when the spikes are most likely to be visible, generally in June, in each year of monitoring.

Woodcock

- 6.22 A single nocturnal survey of accessible areas of suitable grassland will be undertaken in February or March during each year of monitoring. This will entail a suitably experienced ornithologist walking through such areas at night with night vision equipment, searching for feeding woodcock, recording the numbers of birds seen and their locations.
- 6.23 Other nocturnal wildlife encountered will also be recorded.

Water voles

6.24 A water vole survey of areas of suitable habitat will be undertaken by a suitably experienced ecologist on a single visit between mid-April and the end of June in each year of monitoring. Field signs of water voles will be searched for and numbers of latrines recorded in each wetland feature. Local residents with a particular interest will be invited to take part.

Dissemination of results

6.25 A report will be produced from each of year of monitoring and published on the Eddington / North West Cambridge website.

